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2710 Curtiss Street P.O. Box 1412 Downers Grove, IL 60515-0703 Phone: 708-969-0664 Fax: 708-969-0827

Providing a Better Environment for South Central DuPage County STAFF

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LEGAL COUNSEL

Michael C. Wiedel

April 13, 1995



Larry McDaniel Plant Superintendent Tricon Industries, Inc. 2325 Wisconsin Downers Grove, Illinois 60515

Dear Mr. McDaniel:

Enclosed is an Industrial Wastewater Discharge Permit Application. The current permit issued to Tricon Industries Inc. will expire October 15, 1995. The District's ordinance requires that application for a permit renewal be made no later than 90 days prior to the permit's expiration date, which means this application should be submitted no later than July 15. 1995.

Please note that the only monitoring required for the application is from the inspection manhole located at the front of the building, which is designated as sampling point 001-C in the current permit. We are asking for the monitoring to be done on the total plant flow to determine compliance with the District's local ordinance limits. We have the self monitoring data from your reports to indicate the compliance status in regards to the categorical standards.

If you have any questions, please feel free to call me.

Sincerely,

DOWNERS GROVE SANITARY DISTRICT

Janet M. Buchner

Laboratory Services Director

Enclosures

DOWNERS GROVE SANITARY DISTRICT INDUSTRIAL DISCHARGE PERMIT APPLICATION/BASELINE REPORT [40 CFR PART 403 12(b)(1-7)]

Who should complete this application?

Users identified as being Significant Industrial Users (SIU) according to the definition of an SIU in the District's Sewer Use Ordinance:

- 1. a user with a process flow of 25,000 gallons or more, per average work day;
- a discharge flow greater than 1 percent of the flow in the District's wastewater treatment system;
- a user that has in its wastewater incompatible pollutants as defined pursuant to Section 307 of the Clean Water Act, State Statutes, or applicable federal or state rules and regulations;
- 4. any user found by the District, IEPA or USEPA to have significant impact, either singly or in combination with contributing industries, on the wastewater treatment system, the quality of sludge, the system's effluent quality, or air emissions generated by the system;
- 5. a user subject to any National Categorical Pretreatment Standard.

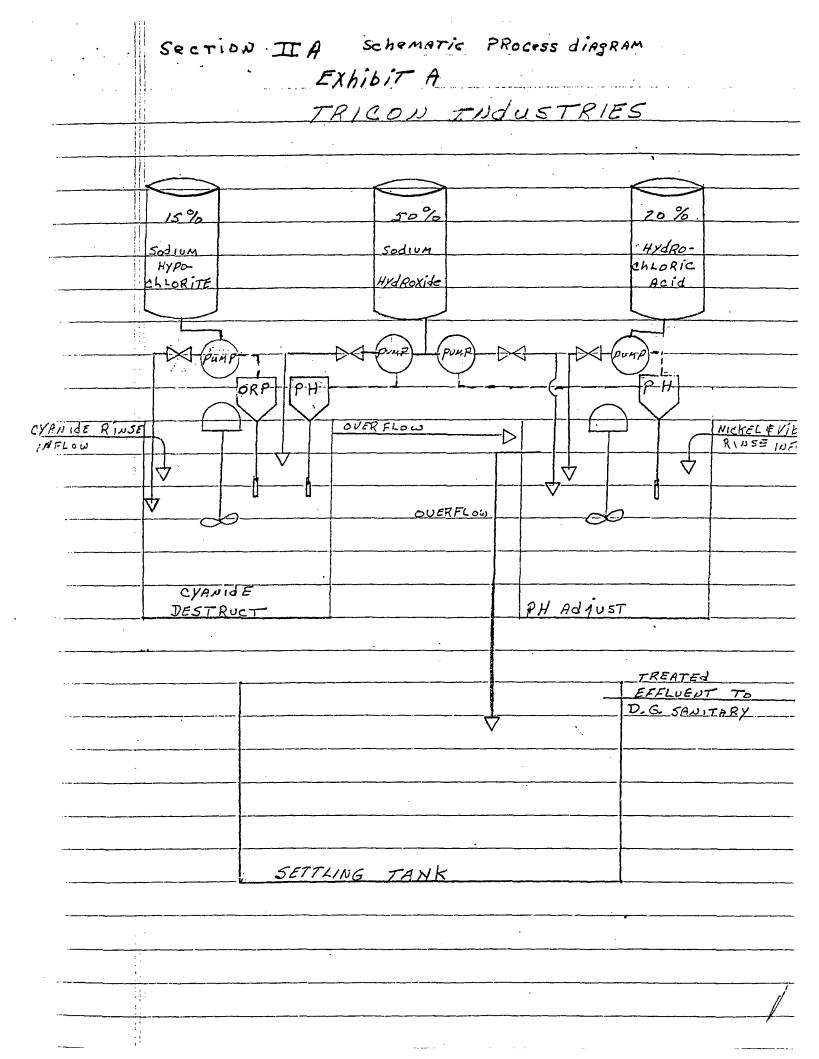
Where and when must this application be submitted?

The application must be submitted in a completed form to the District offices, 2710 Curtiss Street, Downers Grove, Illinois 60515. The due date for new users is <u>90 calendar days prior to initial discharge</u>. For permit renewal the application is due <u>90 calendar days from the date of the cover letter</u>, unless a different date is required in the cover letter.

Citations following headings in this application refer to the appropriate section and paragraph in the General Pretreatment Regulations for Existing and New Sources, 40 CFR Part 403.12 (b) (1-7), (published in the January 28, 1981 Federal Register) and any amendments to these regulations.

. DOWNERS GROVE SANITARY DISTRICT Application for Industrial Discharge Permit

SEC	TION I. Identifying Information [403.12 (b)(1)]
A.	Facility Name: TRICON INdusTRIES
B.	Business Address
	Street: 1600 Eisenhower LANE City: Liste State: IL.
C.	Location of Permitted Discharge
	Street: 2325 WISCONSIN AVE. City: Downers GROVE State: IZ.
D.	Name of person completing this application:
	Name: LARRY McDANiel Title: Plant Supt. Phone: 28-964-2330
E.	Organization of Business: (sole proprietorship, partnership, or Corporation)
	1. If sole proprietorship, give the name of owner and assumed name, if different than answer to I(A) above.
	2. If partnership, give names of general partners and assumed name if different from I(A) above.
	3 If corporation, give state in which incorporated, and the name and address of registered agent.
	State: <u>Delaware</u> Agent Name: <u>PRENTICE HALL INC.</u>
	Agent's Address: 375 Hudson 57: NY, NY 10014
F.	Number of Employees: 380 (average annual number of employees at permitted facility, all shifts)
G.	Average Annual Days Per Week of Operation: 6 (approximate annual average, including process and clean up schedules)
н.	Time and Duration of Discharge to Sanitary Sewer:
	Discharge occurs from
	Circle the Days of the week discharge occurs: S M (C) (C)



I.	List Standard Industrial Code (If more than one applies, 15	es (SIC) which a ist in descendin	pply to your facility: g order of importance)
	3089 : 3678	: 3679	; 3613 .
SECT	FION II. <u>Production Data [40]</u> (complete only if re		letter)
	Describe any process operation wastewater to the sanitary see each process expressed as an	ewer system and	the production rate for
		Averag	e Rate of Production
		Basis	Amount (exact figure or
	eration Description	(Choose One)	verifiable estimate)
	TING OPERATION	Daily	
WITH	H WASTE TREATMENT		
		<u>Monthly</u>	
		Yearly	1,816,000 384.
		Daily	
		Monthly	
		Yearly	
		Daily	
		<u>Monthly</u>	
		V1	
(Att	ach additional sheets if nece	Yearly essary)	
•			
В.	Schematic Process Diagram [40	03.12 (b)(3)]	
	Provide a schematic diagram f		

SECTION III. Wastewater flow rates [403.12 (b)(4)(i &ii)]

Briefly describe any processes which result in the discharge of wastewater to the sanitary sewer system, the type of discharge, either batch or continuous during operation, the volumes per batch and/or volume per day of wastewater discharged. Process 1: PLATING OPERATION WITH WASTEWATER TREATMENT Discharge is: Continuous (X) Volume per day: 6500 Gallons Batch () Volume per Batch Gallons Batches/Day Process 2: Discharge is: Continuous () Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day Process 3: Discharge is: Continuous () Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day Batch () Volume per Batch Gallons Batches/Day						
expected throughout the year as a total for the facility) 15.000	Α.	provided by the Industrial Us other verifiable methods are	ser and must	t be physic	cally measu	red unless
Annual Daily Average Flow (Gals/Day): (report total facility flow during a 24 hour period for an average work day) 10,000						
Describe any seasonal, monthly or weekly flow variations: N/A B. Industrial Process Discharges Briefly describe any processes which result in the discharge of wastewater to the sanitary sewer system, the type of discharge, either batch or continuous during operation, the volumes per batch and/or volume per day of wastewater discharged. Process 1: PLATING OPERATION WITH WASTEWATER TREATMENT Discharge is: Continuous (X) Volume per day: 6500 Gallons Batch () Volume per Batch Gallons Batches/Day Process 2: Discharge is: Continuous () Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day Process 3: Discharge is: Continuous () Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day Batch () Volume per Batch Gallons Batches/Day			15	000	(Gals/	Day)
Describe any seasonal, monthly or weekly flow variations: N/A B. Industrial Process Discharges Briefly describe any processes which result in the discharge of wastewater to the sanitary sewer system, the type of discharge, either batch or continuous during operation, the volumes per batch and/or volume per day of wastewater discharged. Process 1: PLATING DPRATION WITH WASTEWATER TREATMENT Discharge is: Continuous (X) Volume per day:						y flow
B. Industrial Process Discharges Briefly describe any processes which result in the discharge of wastewater to the sanitary sewer system, the type of discharge, either batch or continuous during operation, the volumes per batch and/or volume per day of wastewater discharged. Process 1: PLATING OPERATION WITH WASTEWATER TREATMENT Discharge is: Continuous (X) Volume per day:			10,0	000	(Gals/	Day)
Briefly describe any processes which result in the discharge of wastewater to the sanitary sewer system, the type of discharge, either batch or continuous during operation, the volumes per batch and/or volume per day of wastewater discharged. Process 1: PLATING PRRATION WITH WASTEWATER TREATMENT Discharge is: Continuous (X) Volume per day: 6500 Gallons Batch () Volume per Batch Gallons Batches/Day Process 2: Discharge is: Continuous () Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day Process 3: Discharge is: Continuous () Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day Batch () Volume per Batch Gallons Batches/Day		,	•		riations:	
wastewater to the sanitary sewer system, the type of discharge, either batch or continuous during operation, the volumes per batch and/or volume per day of wastewater discharged. Process 1: PLATING PERATION WITH WASTEWATER TRESTMENT Discharge is: Continuous (X) Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day Process 2: Discharge is: Continuous () Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day Process 3: Discharge is: Continuous () Volume per day: Gallons Batch () Volume per Batch Gallons Batches/Day	В.	Industrial Process Discharges	3			
Discharge is: Continuous (X) Volume per day:		wastewater to the sanitary set batch or continuous during or volume per day of wastewater Process 1: Planing o	ewer system, peration, the discharged.	the type ne volumes	of dischar per batch	ge, either and/or
Batch () Volume per BatchGallons Batches/Day Process 2:		TREATMENT		. 		
Process 2: Discharge is: Continuous () Volume per day:		Discharge is: Continuous (>	() Volume	per day:	6500	Gallons
Discharge is: Continuous () Volume per day:		Batch () Volume per Bat	ch	Gallons	Batches/	Day
Batch () Volume per BatchGallons Batches/Day Process 3: Discharge is: Continuous () Volume per day:Gallons Batch () Volume per BatchGallons Batches/Day		Process 2:				
Batch () Volume per BatchGallons Batches/Day Process 3: Discharge is: Continuous () Volume per day:Gallons Batch () Volume per BatchGallons Batches/Day						
Process 3: Discharge is: Continuous () Volume per day:		Discharge is: Continuous () Volume	per day:		Gallons
Discharge is: Continuous () Volume per day:Gallons Batch () Volume per BatchGallons Batches/Day		Batch () Volume per Bat	ch	Gallons	Batches/	Day
Discharge is: Continuous () Volume per day:Gallons Batch () Volume per BatchGallons Batches/Day		Process 3:			·····	
Batch () Volume per BatchGallons Batches/Day			- کا معردی فال فالدرد سے بھی فی اللہ			
		Discharge is: Continuous () Volume	per day: _		Gallons
(attach additional pages if necessary)						Day

C. Using the information from plant records, flow metering, water and sanitary sewer bills, show where the water used in the individual processes listed below comes from and is discharged to. Report the information in gallons per day. The final total of water used and discharged should equal zero.

	<u>water</u>		water		
Water Used For:			DGSD	Other	
	Gals/Day	.Source(1).	Gals/Day.	Gals/Day.	To(2)
Sanitary	. 3383	<u> А</u>	<i>3</i> 383 .	N/A .	Α
Processes	. 6395	A	639 5 .	N/A.	A
Cooling					·
		·			
Scrubber Water Air Pollution Control		·	<u>-</u>		· · · · · · · · · · · · · · · · · · ·
S <u>oiler</u>	<u></u>	.1			
Other (Please describe)		·	<u></u>		
Total (Gals/Day)					
(2) Enter the app (a) DGSD san (c) product; (f) other (p	itary sewer (d) <mark>evap</mark> ora	; (b) stor tion; (e) h	m or surfa auled by v	ce water; wastewater	hauler;
			· · · · · · · · · · · · · · · · · · ·		
D. Environmental Permits this facility:	s [403.12 (b)(2)] Ident	ify all pe	ermits held	by
		o)(2)] Ident	ify all pe	ermits held	_
this facility:	<u>Pe</u>		ify all pe		mber
this facility: Permitting Agency	<u>Ре</u> 	ermit Type	ify all pe	Permit Nu	mber
this facility: Permitting Agency	Pe 	ermit Type		Permit Nu 8407002	mber

SECTION IV. Raw Materials and Chemicals

A. Give technical and common names of raw materials and chemicals that are used in the manufacturing or other processes, that could be discharged to the sanitary sewer. In the case of proprietary compounds, provide the manufacturer's name.

Information for this section can be taken from self-monitoring data, material safety data sheets (MSDS), suppliers of materials, raw material labels and various trade organizations.

<u>Technical Name</u>	Commor	n Name	<u>Manufacturer's Name</u>
(Please attach any	additional inf	ormation on	a separate sheet)
Are any of the follow having potential for indicate by checking	dischrage to t	the sanitary	premises, therefore sewer? If yes, please
Acrolein (2) Acrylonitrile (3) Benzene (4) Toluene (86) Ethylbenzene (38) Carbon tetrachlori Chlorobenzene (7) 1,2-Dichloroethane 1,1,1-Trichloroeth 1,1-Dichloroethane 1,1-Dichlorethylen 1,1,2-Trichloretha 1,1,2,2-Tetrachlor Chloroethane (16) Dichlorodifluorome Dichloro-dibromome Tetrachloroethylen Trichlorethylene (Vinyl Chloride (88 2,2-Trans-Dichloro Bis(chloromethyl)e Fluoranthene (39) Fluorene (80) Chysene (76)	(10) ane (11) (13) e (39) ne (14) oethane (15) thane (50) thane (51) e (85) 87)) ethylene (30)	1,2-Dich 1,3-Dich 1,4-Dich Hexachlo Hexachlo 1,2-Dich 1,3-Dich Methylen Methyl c Methyl b Bromofor Dichloro Trichloro 4-Nitrop 2,4-Dini 4,6-Dini Pentachl Anthrale Benzo (A Benzo (B Benzo (A	e chloride (44) hloride (45) romide (46) m (47) bromomethane (48) ofuoromethane (49) henol (58) trophenol (59) tro O-cresol (60) orophenol (64)

```
Benzo (G,H,I) perylene (79)
       Phenanthrene (81)
       Hexachlorobenzene (9)
                                            4-Chlorophenylphenyl ether (40)
     ___1,2,4-Trichlorobenzene (8)
                                           __3,3-Dichlorobenzidine (28)
                                           _Benzidine (5)
      __Bis(2-chloroethoxyl)methane(43)
       Naphthalene (55)
                                           Bis (2-chloroethyl) ether (18)
      2-Chloronaphthalene (20)
                                            1,2-Diphenylhydrazine (37)
                                            Hexachlorocyclopentadiene (53)
      _Isophorone (54)
     __Nitrobenzene (56)
                                            N-Nitrosodiphenylamine (62)
                                            _N-Nitrosodimethylamine (61)
       2,4-Dinitrotoluene
    ___2,6-Dinitrotoluene (36)
                                            N-Nitrosodi-N-propylamine (63)
     __4-Bromophenylphenylether (41)
                                           __Bis(2-chloroisopropyl)ether
                                          p-Chloro-M-cresol
      Bis(2-ethylhexyl) phthalate (66)
                                            2-Chlorophenol (24)
       Di-N-octyl phthalate (69)
    ___Dimethyl phthalate (71)
                                            _2,4-Dichlorophenol
     __Diethyl phthalate (70)
                                           _2,4,6-Trichlorophenol (21)
    ___Di-N-Butyl phthalate (68)
                                            2,4-Dimethylphenol (34)
    ___Acenaphthylene (77)
                                            Heptachlor (100)
     ___Acenapthene (1)
                                            _Alpha-endosulfan (95)
     ___Butyl Benzyl phthalate (67)
                                            _Beta-endosulfan (96)
     __Phenol (65)
                                            Endosulfan-sulfate (97)
     __2-Nitrophenol (57)
                                            _Alpha-BHC (102)
      __Aldrin (89)
                                            _Beta-BHC (103)
     __Dieldrin (90)
                                            _Gamma-BHC (104)
    ___4,4-DDE (92)
___4,4-DDE (p,p-DDX)
                                            _Delta-BHC (105)
                                            _Antimony (114)
     __Endrin (98)
                                            _Arsenic (115)
     __Heptachlor epoxide (101)
                                            _Beryllium (117)
                                         ∠Cadmium (118)
       Xylenes
                                         Chromium (119)
       Toxaphene (113)
                                         ___Copper (120)
      _Chlordane (91)
                                         _∠Lead (122)
       PCB-4242 (Arochlor 1242) (106)
       PCB-1254 (Arochlor 1254) (107)

✓ Total cyanides (121)

     __PBB-1221 (Arochlor 1221) (108)
                                           __Mercury (123)
     __PCB-1232 (Arochlor 1232) (109)

✓ Nickel (124)

     __PCB-1248 (Arochlor 1248) (110)
                                            Selenium (125)
      _PCB-1260 (Arochlor 1260) (111)
                                          Silver (126)
                                            Thallium (127)
     _PCB-1016 (Arochlor 1016) (112)
     __Endrin Aldehyde (99)

∠Zinc (128)

    ___Asbestos (116)
                                            _Alkyl Epoxides
    ___2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) (129)
      Are any of the following materials or conditions charateristic of the
wastewater discharge by any process in the facility?
      _Mineral Acids (sulfuric, hydrochloric, nitric, hydrofluoric,
       chromic and/or phosphoric in any concentration)
     __Radioactive nucleotides
    ___BOD greater than 200 mg/L
      _Total suspended solids greater than 250 mg/L
     __Fats, oils and grease greater than 100 mg/L
     __pH less than 5 or greater than 9
     __Strong alkaline solutions (sodium hydroxide, calcium hydroxide)
     ___Temperatures greater than 157 degrees F or 65 degrees C.
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C. Pollutant Measurement [403.12 (b)(5 ii & viii)

Attach analytical laboratory reports for the samples and parameters listed in the application below. These reports must include the analytical laboratory's name, address, telephone number, sampling dates, sample types (i.e., composite, grab, automatic or manual composite, etc.,), a description of the sampling location and identity of the parameters with units of measurement.

Facility: TRICON INDUSTRIES, INC.

2325 Wisconsin, Downers Grove, Illinois 60515

Sampling Point	Sample Type	Number of Samples	<u>Parameters</u>
001-C (1)	24 hour composite	one	Cadmium T Chromium T Copper T Lead T Manganese T Mercury T Molybdenum T Nickel T Silver T Zinc T
001-C	Grab	one During composite sampling period	Total Cyanide

(1) 001-C is the manhole at the front of the building, where the total plant flow can be evaluated.

Samples shall be representative of the flow and shall be preserved at the time of collection.

SECTION V. Process Wastewater Pretreatment System Operations

A. Describe the pretreatment given to process wastewaters prior to discharge to the sanitary sewer system. (Attach additional pages if necessary)

See ATTACHMENT

- B. Does the pretreatment facility have a construction permit issued by IEPA?
 - No () Yes (X)
 If yes, what is the IEPA permit number? 1984-F8-1508.
- C. Have plans for the pretreatment facility been submitted and approved by the Downers Grove Sanitary District? No () Yes (χ) N/A ()

Process Wastewater Pretreatment Systems Operations Section V. Part A.

5/3/95

Tricon is a manufacturer of electromechanical switches and connectors. As part of the processes we employ, plating of gold, silver, copper and nickel, it is these that require waste water treatment.

Domestic waste water is discharged directly to the Downers Grove sanitary system.

Rinse waters from the plating operations are treated and discharged in a continuous treatment method as follows:

1) Rinse waters from the cyanide plating baths are discharged, by gravity, into the 1st pit. This pit contains a pH controller with sensor and set points of 10.0 - 11.6. An ORP controller with sensor and set points of 562 and 658. The pit is also equipped with a mixer and two (2) pumps with backflow preventers, to add Sodium Hypochlorite and Sodium Hydroxide at the correct times as determined by the pH and ORP controllers. Cyanide is reduced to cyanate through oxidation with the use of Sodium Hypochlorite. Sodium Hydroxide is used to control pH.

To verify sufficient free chlorine levels are maintained, on a daily basis, starch paper is used by comparing developed colors with a chart. Three (3) samples per month are taken and analyzed by an outside laboratory and D.G. Sanitary District. Average levels of cyanide are < .02 mg/L. This effluent overflows to the 2nd pit.

- 2) Rinse waters from the non-cyanide plating baths are discharged, by gravity, into the 2nd pit. Pit #2 contains a pH controller with sensor and set points of 6.0 9.0, a mixer and two (2) pumps with backflow preventers, to add Sodium Hydroxide and Hydorchloric Acid at the correct times as determined by the pH controller. Some precipitation occurs. Effluent from this pit overflows to the settling pit.
- 3) Settling occurs and effluent is discharged to the D.G. sanitation system. Sludge is removed every two (2) or three (3) years or as determined by measuring its depth. The pits are cleaned and sludge is analyzed, manifested and disposed of in accordance with all state and federal regulations.

D.	Provide the names of personnel who oper operation of the pretreatment system, t they are IEPA Class K certified operato	heir job title and indicate if
	Name: FRANK MRocZKA Class K certified? Yes(X) No ()	Title: PLATING Supervisor
·	Name: <u>GARY KAuPie</u> Class K certified? Yes(X) No ()	Title: PLATER
	Name: LARRY McDANIeL Class K certified? Yes(X) No ()	Title: PLANT SupT.
SEC.	FION VI. Plant Layout Diagram	
which sand	Attach a diagram of your facility's peach building on the premises. For shows the locations of water meditary sewer lines and manholes, floor dearm sewer lines and manholes and streets.	each building, provide a drawing ters, any sewage flow meters,
SEC	TION VII. Statement of Compliance [403.	12(b)(7)]
Α.	Based on the information in this permit of your knowledge, is the wastewater di able to meet the applicable pretreatment basis?	scharged from this facility
	Yes (X) No (), Remarks:	
В.	If not, is additional operation and mais additional pretreatment of the wastewat applicable standards?	
	Yes () No (), Remarks:	
C.	If the answer to Section VII B above is submit as part of this application, a c showing the shortest schedule for the U pretreatment. The compliance schedule become attached to and part of the Indu compliance schedule, or work plan, shall	ompliance schedule or work plan ser to provide such 0 &M and/or given in this application will strial Discharge Permit. The

Not later than fourteen (14) days following each date in the schedule and the final date of compliance, the User shall submit a progress report to the District including, as a minimum, whether or not it complied with the increment of progress to be met on such date, if not, the date on which it expects to comply with this increment of progress, the reason for the delay, and the steps taken by the User to return construction to the schedule established. In no event shall more than six (8) months elapse between progress reports to the District.

increment of progress exceeding six (6) months.

SECTION VIII. Certification [403.12(b)(6)]

This application must be reviewed and certified by a principal executive officer of the discharger as to the accuracy of the contents. If the services of a professional engineer who is familiar with the pretreatment facility were required to in completing this application, their certification as a qualified professional is requested as well.

I (we) declare that I (we) have examined and are familiar with this Industrial Discharge Permit Application and certify that to the best of my (our) knowledge and belief, it is true, correct and complete.

Principal Executive	Officer
KALPH W. GRANDLE	EXEC. U.P.
Print Name	Title
Kuplus I Samble	5.24-9-
Signature	Date
Qualified Professi	ional
Print Name	Title
Gi an et u va	No+ a

It is the responsibility of the Industrial User to be aware of and in compliance with all federal, state and local rules, regulations, laws and ordinances, as they pertain to the discharge of wastewaters generated at the User's facility.



Enviro-Test/Perry Laboratories, Inc. Chicago Dairy & Food Laboratories

319 OGDEN AVENUE DOWNERS GROVE, IL 60515-3142 (708) 963-4672

FAX # (708) 963-4685

IEPA 100186

CERTIFIED LABORATORY REPORT

IDPH 17134

Tricon Industries Mr. Larry McDaniel 2325 Wisconsin Ave. Downers Grove, IL 60515

June 06, 1995 Received: 05-22-95 Completed:06-05-95 P.O. \$:47506

Lab No.	Sample Identifica	tion		
N4538	Grab 001-C	05-22-95	12:40PM	
N4539	Comp 001-C	05-22-95		

Test Parameter	N4538	N4539	
Cyanide (total)	LT .01		
Cadmium		LT .02	
Chromium		LT .05	
Copper		.18	
Lead		LT .025	
Nickel		.16	
Silver		LT .05	
Zinc		LT .05	
Manganese		LT .025	
Mercury		LT .0005	
Molybdenum		LT .25	

LT means Less Than

All results are total and in ppm(mg/l) unless otherwise noted; 1ppm = 1000ppb. Approved for the examination of water, dairy, chemical, microbiological and container testing by the ILDPH and ILEPA.

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete and accurate.

Laboratory Director